

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

RESOLUTION NO. R04-2011-XXXX

APPROVING THE ENVIRONMENTAL CHECKLIST AND
ADOPTING A MITIGATED NEGATIVE DECLARATION FOR
ENHANCED IN SITU BIOREMEDIATION OF VOLATILE ORGANIC COMPOUNDS IN
GROUNDWATER, RHO-CHEM FACILITY, INGLEWOOD, CALIFORNIA
(FILE NO. 11-065)

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region finds that:

1. California Water Code (CWC) section 13260(a)(1) requires that any person discharging wastes, or proposing to discharge wastes other than into a community wastewater collection system, which could affect the quality of the waters of the State, shall file a report of waste discharge (ROWD) with the Regional Water Quality Control Board (Regional Board) exercising jurisdiction in the area, and that Regional Board shall then prescribe requirements for the discharge or proposed discharge of wastes.
2. In 2002, CEMEX, Inc. and Rho-Chem, LLC (formerly known as Rho-Chem Corporation; collectively the Respondents) entered into a Corrective Action Consent Agreement¹ (Consent Agreement) executed by the California Department of Toxic Substance Control (DTSC) in reference to the Rho-Chem facility (Rho-Chem or site). The Consent Agreement was drafted following the discovery of impacted soil and groundwater at the site.
3. The facility is 1.1 acres and has been in operation since the early 1950's, with the initial owner identified as American Better Chemicals (American). In 1974 American merged with ABCO Industries and changed the facility name to Rho-Chem Corporation. The facility began recycling waste solvents in 1964. In 1989 Browning Ferris Industries, Inc. acquired the site, which was then later acquired in 1990 by Southdown, Inc. (Southdown) retaining the Rho-Chem name. The operations and the site were then purchased by Phillip Services Corporation (PSC) in 1995 and Southdown was acquired by CEMEX in 2000. Based on the most recent acquisitions, CEMEX and Rho-Chem LLC remain involved with respect to the assessment and remediation work at the site as the Respondents. Although Rho-Chem LLC is the legal facility owner, operator, and land owner of record, CEMEX is implementing the proposed Pilot Study. Consequently, CEMEX is listed as the facility operator only with respect to the implementation of the pilot study. For the purposes of this waste discharge permit, CEMEX is the Discharger.

¹ Department of Toxic Substance Control (DTSC), 2002, HWCA P3-01/02-005, Corrective Action Consent Agreement, Rho-Chem Corporation, 425 Isis Avenue, Inglewood, California, EPA ID No. CAD008354432, issued to Rho-Chem Corporation (A Subsidiary of Philip Services Corporation) and CEMEX, Inc., executed November 25, 2002.

Draft October 17, 2011

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4. Soil and groundwater beneath the site is polluted with volatile organic compounds (VOCs), including mainly tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2,-DCE).
5. The Discharger proposed to conduct a pilot test at the Facility to evaluate the remediation of chlorinated VOCs in shallow groundwater by enhanced in-situ bioremediation with bioaugmentation to remediate selected source areas. In-situ bioremediation involves the addition of carbon source amendments (i.e. sodium lactate, etc.) to the shallow groundwater. Bioaugmentation involves the addition of selected non-pathogenic (naturally derived, not genetically engineered) chlorinated ethene-degrading *Dehalococcoides ethenogenes* cultures, referred to as KB-1TM, in selected areas to facilitate reductive dechlorination. Details of the remediation and methods are included in the pilot test work plan, "Pilot Study Work Plan for Evaluation of Enhanced in Situ Bioremediation of Volatile Organic Compounds in Groundwater" dated August 9, 2010., prepared by AMEC and reviewed and acknowledged by DTSC on December 27, 2010. Although DTSC does not formally approve voluntary pilot tests, the acknowledgement letter noted that, "DTSC believes this is a prudent course of action to conduct this pilot test."
6. The use of carbon substrates to induce in-situ bioremediation is covered in the General Waste Discharge Requirements (WDR), Order No. R4-2002-0030 adopted by this Regional Board on January 24, 2002, for the groundwater remediation at petroleum hydrocarbon fuel and/or volatile organic compound impacted sites. Subsequently, this General WDR was amended on March 1, 2007 to cover more applications and become Order No. R4-2007-0019.
7. The General WDR allows the injection of carbon substrate and sodium bromide, but does not specifically provide for the addition of KB-1. The Discharger has filed a Report of Waste Discharge and applied for Site-specific Waste Discharge Requirements (WDR) to add KB-1 to the shallow groundwater. Site-specific WDR have been developed for the addition of KB-1 in conjunction with the injection of carbon substrate at this site.
8. Groundwater beneath the Facility is unconfined and the direction of flow is undefined at the water table and generally toward the southeast within the Gage aquifer. The Discharger shall monitor presence and concentration of injection solution and waste constituents and evaluate flow conditions and any potential for migration of waste constituents outside the remediation areas. Monitoring of groundwater quality and flow conditions across the entire Facility is required by a comprehensive separate Facility-wide groundwater monitoring program pursuant to the Consent Agreement.
9. The injection of the carbon substrate with KB-1 to the groundwater is a discharge of waste pursuant to section 13260 of the California Water Code. However, the discharge of the carbon substrate with KB-1 is intended to provide more efficient remediation of VOC-contaminated groundwater and is anticipated to reduce cleanup time and costs.
10. The Water Quality Control Plan (Basin Plan) for the Los Angeles Region designates the beneficial uses of groundwater in the Central Basin for municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.

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11. State Water Resources Control Board Resolution 68-16 (*“Statement of Policy With Respect to Maintaining High Quality of Waters in California”*) requires the Regional Board in regulating discharges of waste to maintain the high quality of waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and potential beneficial uses, and will not result in water quality less than that described in plans and policies (e.g., quality that exceeds water quality objectives). As stated in the Waste Discharge Requirements, the permitted discharge is consistent with Resolution No. 68-16. The discharge may result in some localized exceedance of background concentrations of constituents such as total organic carbon, and total dissolved solids (TDS), but this is not anticipated to result in any long-term groundwater degradation and if effective the discharge will cleanup the VOCs in groundwater
12. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit written comments. The Regional Board, in a public meeting on December 8, 2011, heard and considered all comments pertaining to the discharge and to the tentative Waste Discharge Requirements.
13. This Regional Board has assumed lead agency role for the WDR under the California Environmental Quality Act (Public Resources Code section 21000 et seq.) (CEQA) and has conducted an Initial Study (in the format of an expanded Environmental Checklist) in accordance with title 14, California Code of Regulations, section 15063, titled Guidelines for Implementation of the California Environmental Quality Act. Based on the Initial Study, Regional Board prepared a Mitigated Negative Declaration that the project will not have a significant adverse effect on the environment.
14. Copies of the Environmental Checklist and proposed Mitigated Negative Declaration were transmitted to the State Clearing House, all agencies and interested persons and was circulated for public comment. All comments received have been addressed by Regional Board. The Regional Board considered all comments and evidence at a public hearing held on December 8, 2011, at the Metropolitan Water District of Southern California, Board Room, 700 North Alameda, Los Angeles, California, and good cause was found to approve the Environmental Checklist and adopt a Mitigated Negative Declaration.

THEREFORE, BE IT RESOLVED that the Regional Board:

1. Adopts the Initial Study and Mitigated Negative Declaration and directs the Executive Officer to file a Notice of Determination with the State Clearinghouse within 30 days consistent with the CEQA Guidelines.
2. Directs that a copy of this Resolution shall be forwarded to the State Water Resources Control Board and all interested persons.

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CERTIFICATION

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region on December 8, 2011.

Samuel Unger
Executive Officer

Date

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